

IN THE CLAIMS

Please amend the claims as follows.

1 1. (Currently Amended) An apparatus comprising:
2 at least one processor;
3 a memory coupled to the at least one processor;
4 a network interface that couples the apparatus to a network that is coupled to [at
5 least one] a plurality of other computer [system] systems; and
6 a cluster communication mechanism residing in the memory and executed by the
7 at least one processor, the cluster communication mechanism including a sliding send
8 window that communicates at least one ordered message to [at least one] a plurality of the
9 other computer [system] systems without waiting for an acknowledge message from [the
10 at least one] any of the plurality of other computer [system] systems before sending out
11 the next ordered message.

1 2. (Original) The apparatus of claim 1 wherein each ordered message includes a header
2 with information that indicates whether an acknowledge message for the ordered
3 messages may be delayed and grouped with at least one subsequent acknowledge
4 message.

1 3. (Original) The apparatus of claim 2 wherein the acknowledge message acknowledges
2 from one to a plurality of ordered messages.

1 4. (Currently Amended) A networked computer system comprising:
2 a cluster of computer systems that each includes:
3 a network interface that couples each computer system via a network to
4 other computer systems in the cluster;
5 a memory; and
6 a cluster communication mechanism residing in the memory, the cluster
7 communication mechanism enforcing execution of a plurality of received
8 messages in the order the plurality of received messages were received, the cluster
9 communication mechanism including a sliding send window that communicates at
10 least one ordered message to [at least one] a plurality of other computer [system]
11 systems without waiting for an acknowledgment from [the at least one] any of the
12 plurality of other computer [system] systems before sending out the next ordered
13 message.

1 5. (Original) The networked computer system of claim 4 wherein each ordered message
2 includes a header with information that indicates whether an acknowledge message for
3 the ordered messages may be delayed and grouped with at least one subsequent
4 acknowledge message.

1 6. (Currently Amended) A computer-implemented method for processing a task in a
2 clustered computing environment, the method comprising the steps of:
3 providing a cluster communication mechanism executing on a first computer
4 system in a cluster that includes a sliding send window that communicates at least one
5 ordered message to [at least one] a plurality of other computer [system] systems in the
6 cluster without waiting for an acknowledgment from each computer system in the cluster
7 that received an ordered message before sending out the next ordered message;
8 the cluster communication mechanism sending a first ordered message to [at least
9 one] a first plurality of other computer [system] systems in the cluster; and
10 the cluster communication mechanism sending a second ordered message to a
11 second plurality of other computer systems in the cluster without waiting for a response to
12 the first ordered message from [the at least one] each of the first plurality of other
13 computer [system] systems in the cluster.



1 7. (Currently Amended) The method of claim 6 further comprising the step of [the] at
2 least one of the first plurality of other computer [system] systems in the cluster
3 responding to the first and second ordered messages by sending a single acknowledge
4 message to the cluster communication mechanism that acknowledges both the first and
5 second ordered messages.

1 8. (Original) The method of claim 6 wherein the first and second ordered messages each
2 include a header with information that indicates whether an acknowledge message for the
3 first and second ordered messages may be delayed and grouped with at least one
4 subsequent acknowledge message.

- 1 9. (Currently Amended) A program product comprising:
2 (A) a computer program comprising:
3 (A1) a cluster communication mechanism that includes a sliding send
4 window that communicates at least one ordered message to [at least one] a
5 plurality of other computer [system] systems in a cluster without waiting for an
6 acknowledgment from [the at least one] any of the plurality of other computer
7 [system] systems before sending out the next ordered message; and
8 (B) computer-readable signal bearing media bearing the computer program.

- 1 10. (Original) The program product of claim 9 wherein the signal bearing media
2 comprises recordable media.

- 1 11. (Original) The program product of claim 9 wherein the signal bearing media
2 comprises transmission media.

- 1 12. (Original) The program product of claim 9 wherein each ordered message includes a
2 header with information that indicates whether an acknowledge message for the ordered
3 messages may be delayed and grouped with at least one subsequent acknowledge
4 message.

Please add the following new claims.

- 1 13. (New) The apparatus of claim 1 wherein the cluster communication mechanism
2 communicates the at least one ordered message to the plurality of other computer systems
3 via IP multicast.

- 1 14. (New) The apparatus of claim 1 wherein the cluster communication mechanism
2 enforces execution of a plurality of received messages in the order the plurality of
3 received messages were received.

1 15. (New) The method of claim 6 wherein first plurality of computer systems includes all
2 computer systems in the second plurality of computer systems.

1 16. (New) The method of claim 6 wherein the first plurality of computer system
2 comprises the second plurality of computer systems.

1 17. (New) The method of claim 6 wherein the cluster communication mechanism
2 communicates the at least one ordered message to the plurality of other computer systems
3 via IP multicast.

1 18. (New) The method of claim 6 wherein the cluster communication mechanism
2 enforces execution of a plurality of received messages in the order the plurality of
3 received messages were received.

1 19. (New) The program product of claim 9 wherein the cluster communication
2 mechanism communicates the at least one ordered message to the plurality of other
3 computer systems via IP multicast.

1 20. (New) The program product of claim 9 wherein the cluster communication
2 mechanism enforces execution of a plurality of received messages in the order the
3 plurality of received messages were received.

STATUS OF THE CLAIMS

Claims 1-12 were originally filed in this patent application. In the pending office action, claims 1 and 6 were objected to for informalities. Claims 1-12 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,528,605 to Ywoskus. No claim was allowed. In this amendment, claims 1, 4, 6, 7, and 9 have been amended, and new claims 13-20 have been added. Claims 1-20 are currently pending.